



What is FPIES?

FPIES is a type of food allergy that affects the gastrointestinal (GI) tract. Unlike other types of food allergies, FPIES symptoms may not happen right away. They usually happen 1–4 hours after eating a trigger food.

Standard allergy testing, such as skin and blood testing, isn't helpful in determining what foods may cause a FPIES reaction. The treatment for FPIES is complete avoidance of the trigger food.

Most children grow out of FPIES by school age. Your child's medical provider can give you more information regarding how much time will need to pass before your child may be ready for a food challenge. The food challenge would be done in a medical facility under close supervision.

What are symptoms of FPIES?

Symptoms of FPIES generally happen within 1-4 hours after eating a food and may include:

- Repetitive vomiting (throwing up)
- Lethargy (being very sleepy)
- Diarrhea
- Dehydration

FPIES reactions don't cause skin or respiratory symptoms or anaphylaxis. In some cases, FPIES reactions can be life-threatening.

Talk to your child's provider regarding a plan of action in case your child accidentally eats a trigger food.

What are common food triggers with FPIES?

The foods that affect the GI tract of children with FPIES can vary for each child. Many infants and children are allergic to 1-2 foods and others are allergic to several foods.

Teenagers and adults can also develop FPIES to foods. Shellfish is a common trigger in teenagers and adults.

The most common trigger foods in infants and children include:

- Milk
- Soy
- Rice
- Oats

- Other foods, such as bananas, avocado, chicken or sweet potato can be FPIES triggers. See the table on page 3 for details.

If I'm breast feeding, do I need to avoid the food that my child is allergic to?

Not necessarily. While your child should avoid eating the food, breast feeding mothers usually don't need to avoid the food in their own diet. Talk to your child's provider for specific instructions.

When should I introduce solid foods?

Talk with your child's provider or registered dietitian to see if your child is ready for solid foods. Your baby may be ready to start eating solid food if they:

- Are at least 4 months old (corrected age if born prematurely)
- Can hold their head up steadily and sit with help
- Show interest in foods other people are eating
- Don't push food out of their mouth with their tongue

Don't rush into giving your infant solid foods. It's OK to wait until your baby is ready.

Why should my child see a dietitian?

Children who have reacted to multiple foods, and/or need to avoid milk and soy, should be seen by a dietitian with experience working with children with food allergies. This is to make sure your child meets their nutritional needs for growth.

Can I supplement with formula?

If you're breast feeding and would like to supplement with formula, your medical provider can recommend a formula for your child. If they have a history of FPIES to milk and/or soy, a hypoallergenic formula will be recommended.

What foods are age-appropriate for my child?

| Age | Texture | Examples |
|--|--|--|
| 0–4 months | Breastmilk or formula | |
| 4–6 months | Smooth stage 1 or 2 baby foods | Stage 1 pureed peach, broccoli, pumpkin, prune |
| 6–8 months | Homemade purees (smooth not lumpy)—no mixed texture/stage 3 baby foods | Quinoa flakes made into hot cereal, pureed fruits, pureed vegetables, pureed meats |
| 6–9 months (or when baby can hold head up) | <ul style="list-style-type: none"> Crunchy, dissolvable solids* Beginner table foods/soft, mashable foods | <ul style="list-style-type: none"> Freeze dried fruit, Awsum quinoa puffs®, puffed millet, Kix® cereal, Little Bellies corn roundabouts®, Serenity kids puffs® Canned peaches and pears, taco meat (beef), soft, cooked/steamed vegetables (broccoli, cauliflower, squash, white potato) |
| 9–12 months (or when your baby brings hands to mouth) | <ul style="list-style-type: none"> Intermediate table foods (can be mixed texture if your baby can chew) Continue crunchy dissolvable solids and soft mashable foods | <ul style="list-style-type: none"> Quinoa based cold cereals, wheat pasta, corn pasta, quinoa pasta, meatballs made from lamb or beef, roasted potatoes, quartered grapes, ripe fruit pieces (strawberries, blueberries, peach, watermelon) |

*Dissolvable solids are foods that dissolve easily in the mouth without a lot of chewing. Stick-shaped foods works well.

What about vitamins?

If your child is breast fed, a vitamin D supplement is recommended (400 IU = 10 mcg per day). They also may need a vitamin with iron when they're 4-6 months old. Talk with their dietitian or pediatrician if you have questions about vitamin supplements.

What is oral aversion?

Oral aversion is reluctance, avoidance or fear of eating or drinking multiple foods or drinks. Some children with FPIES may develop aversions to foods. It's OK if your child is only eating a few foods.

With the help of their dietitian (and, if needed, a feeding therapist), you can slowly expand their diet. Talk with their dietitian about helping your child meet their nutritional needs. They may need a multivitamin. Try to offer age-appropriate various textures of the foods they do eat and drink.

For example, if your child is eating apple, try applesauce, steamed apple, grated apple and freeze-dried apple.

What foods should I introduce to my child and when?

- Since children with FPIES react to different foods, there aren't scientific recommendations about which foods to introduce first and in what order. Talk with your child's provider about which foods to introduce. This will depend on your child's reaction history.
- The table on the next page can help with the order of food introductions but should be utilized with your child's medical team.
- If your child is already doing well with a food in the table, continue offering that food.
- If your child isn't eating foods with milk, soy, rice or oats, talk with your child's provider about when and how to introduce these foods. If your child is already doing well with foods in the high-risk column, continue to include those foods in your child's diet.
- Infants should continue to have breast milk and/or prescribed formula. Children older than age 1 can continue breast milk and/or prescribed formula or talk with their dietitian about an appropriate calcium-fortified drink.

| Food group | Lower risk | Moderate risk | Higher risk | Highest risk |
|-------------------------|---|--|-----------------------------------|--------------|
| Vegetables | Broccoli, cauliflower, cucumber, kale, onions, mushrooms, parsnip, pumpkin, spinach, Swiss chard | Carrot, squash, white potato, string bean | Sweet potato, peas | |
| Fruits | Blueberry, cantaloupe, mango, papaya, peach, plum, prune, raspberry, strawberry, watermelon | Apple, pear, orange | Banana, avocado | |
| Proteins/Fats | Tree nut butters and seed butters# (almond butter, sunflower seed butter, tahini), canola oil, coconut oil, olive oil, lamb, beef** | Black beans, kidney beans, pinto beans, white beans, lentils, chickpeas** peanuts | Chicken**, turkey**, eggs, fish** | Milk, soy |
| Grains/Grain like foods | Millet, quinoa flakes (flakes can be made into hot cereal), amaranth | Corn, corn grits **, wheat, cream of wheat**, barley, white potato | | Rice, oats |

** Iron-rich/iron-fortified foods. Breast fed infants should be introduced to iron-rich foods at age 6 months. #Nut and seed butters should be thinned with water and added to purees for younger infants.

The table above has been adapted from the International FPIES consensus guidelines and clinical experience.

How long should I trial a new food? How much should I give at one time?

If your child has reacted to more than 1 food in a food group (for example, if they reacted to multiple grains, like wheat, rice and millet), talk to their provider about whether or not to introduce other foods in that food group. If your child has reacted to milk, talk with your child's provider about when and how to introduce soy.

These are 2 suggested approaches for how to introduce new foods. These can be further modified based on family and healthcare provider preferences.

Standard approach

Most children with FPIES can be introduced to 1 new food every 3 to 5 days.

Slower approach

Serve 1 new food over 5-10 days. Start with ¼ teaspoon and double the portion with each serving. Serve once a day or twice a day separated by 6 hours. Stop the feeding if any symptoms occur. Follow your baby's cues.

WEEK 1:

Day 1: ¼ teaspoon at 8 am and ½ teaspoon at 4 pm

Day 2: 1 teaspoon at 8 am and 2 teaspoons at 4 pm

Day 3: 1 tablespoon plus 1 teaspoon at 8 am and 2 tablespoons at 4 pm

Day 4 and onward: Offer up to ¼ cup at 8 am and 4 pm. Offer food they do well with several times a week.

WEEK 2:

Day 6-10: Introduce 1 teaspoon of new food. Repeat schedule above.

Where can I learn more?

The International FPIES Association

<http://fpies.org/>

I-FPIES is an international non-profit dedicated to improving the diagnosis, treatment and quality of life for people with FPIES through advocacy, education, research and support. Educational information provided by this association is reviewed by a medical advisory board.

The FPIES Foundation

<http://fpiesfoundation.org/>

The FPIES foundation is a non-profit dedicated to helping families manage with the challenges of FPIES through education, support and advocacy. Educational information provided by the foundation is reviewed by a medical advisory board.